



ABSTRACT AND BIOGRAPHY

Let's Roll! Rolling Out the NASA Systems Engineering Framework

Have you wondered what NASA is doing to stay on the leading edge of systems engineering? Did you know that NASA has a Systems Engineering Excellence Initiative to stimulate and enable the development and advancement of a sound systems engineering capability across the agency? As part of that initiative, the NASA Office of the Chief Engineer (OCE) is taking a proactive approach to deploying the 3-axis NASA Systems Engineering Framework (SEF) that was defined in the NASA Procedural Requirements for systems engineering – NPR 7123.1A NASA Systems Engineering Processes and Requirements.

The NASA Systems Engineering Framework consists of three elements that make up the NASA systems engineering capability: 1) common technical processes, 2) tools and methods, and 3) workforce, knowledge and skills. These three elements can be thought of as the three axes of the three dimensional SE "box" or framework. The integrated implementation of these three elements is intended to improve the overall capability required for the efficient and effective engineering of NASA systems.

Aware of the danger that the SE Framework could become "shelfware," NASA management was willing to commit the resources to ensure that it was deployed into the systems engineering community, and that it actually impacted the way that systems engineering is implemented across the agency. This presentation describes the three elements of the NASA Systems Engineering Framework, what methods and mechanisms are being used to roll out or deploy it across the agency, how the NASA systems engineering community is being informed and trained, and what the impact has been to date.

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